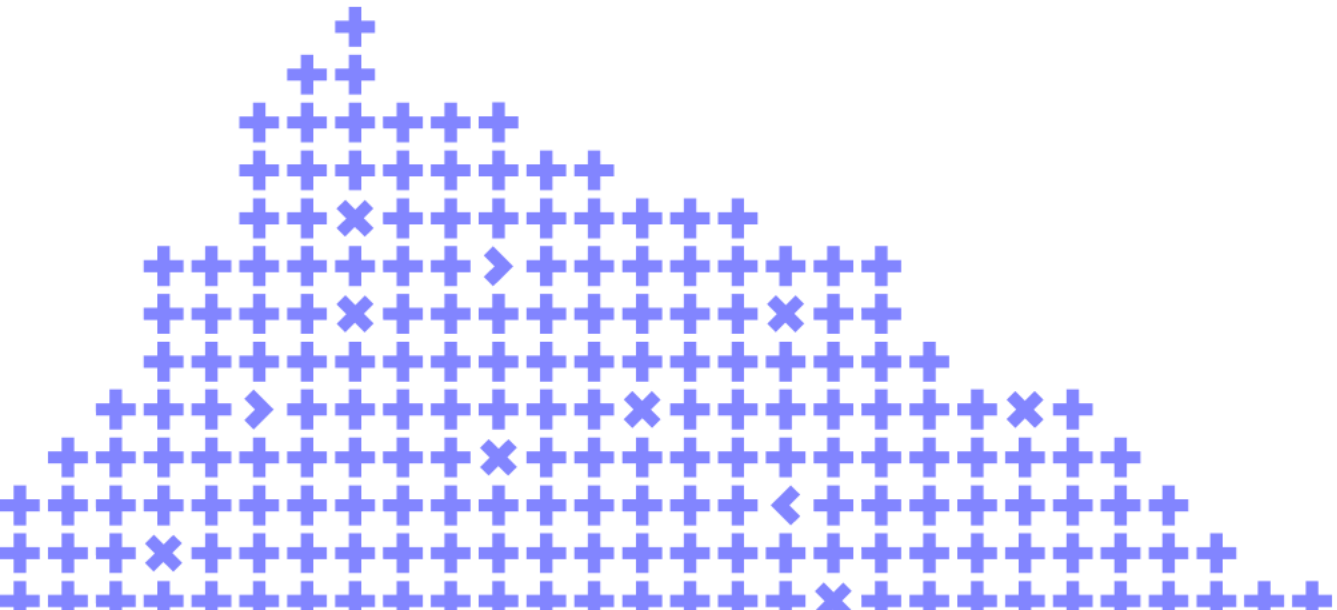
Insider Threat: What is Social Engineering?

Crux Conception, M. Psych



High Load Armenia

Co-organizer

Yandex

Crux_Conception, M. Psych

Founder/CEO

Crux Conception

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]

WHAT IS SOCIAL ENGINEERING:

Social engineering may seem like an innovative and technical experiment, but it is fundamentally straightforward to comprehend.

WHAT IS SOCIAL ENGINEERING:

Social engineering can occur offline or online; however, online social engineering has been widespread over the previous years.

WHAT IS SOCIAL ENGINEERING:

Contingent on the engineer’s expertise and what they pursue to achieve.

WHAT IS SOCIAL ENGINEERING:

This con can either entail the potential target’s motivation to take swift, imprudent actions, or it may include gaining the victim’s trust.

WHAT IS SOCIAL ENGINEERING:

Also, this can either be a swift and straightforward one-time occurrence, or it can transpire in complex phases over a prolonged interval.

Protecting Your Company's Data: From Potential Espionage And Spy Activity

Criticisms of Profiling

Despite its successes, profiling as a field is not without criticism.

These criticisms include:

- Untrained or inadequately trained profilers.
- Promising too much and delivering too little.
- Relying on inadequate or dated databases.

Protecting Your Company's Data: From Potential Espionage And Spy Activity

Protecting Your Company's Data: From Potential Espionage and Spy Activity

- In 2016, 40% of the major companies have reported industrial espionage incidents.
- In 2019, 52% of the major companies have reported industrial espionage incidents.
- In 2022, 60% of the major companies have reported industrial espionage incidents.

WHAT IS CYBER ESPIONAGE?

- Cyber espionage is a form of cyber attack that steals classified, sensitive data or intellectual property to gain an advantage over a competitive company or a government entity.

- Espionage is “the practice of spying or using spies to obtain information about the plans and activities especially of a foreign government or a competing company.”

Leaking.

Spies who leak make classified information publicly available without authorization, usually through contacts with media outlets or via the Internet.

Unlike spies engaged in espionage, most leakers are (at present) not paid or otherwise rewarded materially for their actions.

WHY IS THAT? (Information is power)

Protecting Your Company's Data: From Potential Espionage and Spy Activity

Spying.

- The act of spying is illegal

- Espionage has a legal mid, whereas spying is treated as a distinct and illegal activity

Protecting Your Company's Data: From Potential Espionage and Spy Activity

Two Types of Individuals:

- ORGANIZED
- DISORGANIZED

The Organized Individual:

- Average or above-average IQ.
- Socially adept.
- Skilled-occupation employment history, but uneven work history, sometimes has a job below abilities.
- Sexually competent.
- High birth order in the family, often firstborn.
- Parental discipline perceived by the offender as inconsistent.

The Organized Individual (Cont.)

- May feel angry or depressed at the time of the crime but reports himself as calm during it.
- May use alcohol ("the 'do it' fluid).
- Advancing situational stress, e.g., financial, marital, relationships with females, and employment problems.
- Usually living with a partner.
- Likely to have a car in good condition.

The Disorganized Individual

- Below-average IQ.
- Socially inadequate, often never married, fearful of people.
- Poor work history.
- Sexually incompetent, may never have achieved sexual intimacy.
- Low birth order in the family.
- Harsh parental discipline.

The Disgruntled Individual

- Recurring obsessions, acting impulsively under stress.
- Limited use of alcohol (due to social interactions).
- Lives alone or with a parental figure.
- Lives near work (less thinking regarding routes/transportation).
- Little interest in news media (self-centered).

Protecting Your Company's Data: From Potential Espionage and Spy Activity

Spy vs. Psychopath

A spy figuring out how to distinguish whether abnormal behavior is normal (What's the difference)

Protecting Your Company's Data: From Potential Espionage and Spy Activity

Human fundamentals for espionage: motives, behavior, and profiles of who commits espionage

Human fundamentals

Include complex positive qualities such as:

- Loyalty, dedication, good faith, authentic friendship, social bonds, need for real intimacy and trust, desire to belong in a community, curiosity, creativity.

Human fundamentals (Cont.)

They also include negative qualities such as:

Treachery, greed, cruelty, malice, deception, readiness to dupe and manipulate others for personal gain or entertainment.

Profiling human behavior is the most fascinating science.

- The environment and other people can influence behavior regularly.
- Behavior has reasons; if we understand why we become increasingly empowered.
- Psychological type gives a snapshot of the preferred behavior that comes almost unconsciously to most people.

  (This is the behavior they are comfortable with and can sustain for long periods).
- It is worth noting that people can be versatile and can change, as the behavior they are comfortable with will almost certainly not be suitable for every eventuality.
- People are often asked to “Think and act outside the box” – in these situations, they need to be confident that they can do this.

People who commit espionage sustain double lives. For some people, sustaining such a double identity is exciting and desirable; for others, it is draining and stressful.

Protecting Your Company's Data: From Potential Espionage and Spy Activity

- Dysfunctions in the personality
- A state of crisis
- Ease of opportunity

Elements of Espionage (Cont.)

These individuals frequently have pathological personality features that pave the way to espionage, such as:

Thrill-seeking.
A sense of entitlement.
A desire for power/control.

Protecting Your Company's Data: From Potential Espionage and Spy Activity

Psychological profile of a software engineer.

Software engineers tend to be males, which entails concerned individuals who often like to spend time with their thoughts.

Further, they also are inclined to be conservative. Hence, they are typically detail-oriented, prepared, and like working in an organized setting.

Protecting Your Company's Data: From Potential Espionage and Spy Activity

Psychological profile of a software engineer.

Research regarding psychology has shown several individualities within software engineers:

1) They are more introverted than extraverted

2) They often prefer working with topics by themselves rather than interacting with or influencing others

3) They may find it difficult to express feelings for other people verbally (through speech); instead, they write books about their specific field

Psychological profile of a software engineer.

4) Technology is not just a desire but also a calling for them, they obtain delight from technology and desire to make the world a better place

5) They prefer to work alone or with like-minded people.

6) They can manage multiple tasks simultaneously because their minds are open to processing information rather than shutting out distractions.

Psychological profile of a software engineer.

NOTE:

For the complete profile please email me @ Crux.Conception@gmail.com

Put in the “PROFILE” as the email subject.

Elements of Espionage (Cont.)

Ease of opportunity

The potential individual must have access not only to classified information, but also to an interested customer.

Elements of Espionage (Cont.)

Personal crisis resulting in intense distress.

Though the individual may have regrets in hindsight, at the time he/she initiates the espionage, it appears a logical decision to solve a problem

Elements of Espionage (Cont.)
Vulnerabilities

Vulnerabilities in one area generate vulnerabilities in others. A person with a problematic mix of personality features will tend to have more than the average number of life crises, including:

- ❑Job terminations, relationship or family problems, and financial troubles.

Such personal crises will, in turn, further stress and magnify problematic traits and behaviors.

Money was a solution. Sorry about this, Hollywood. Sorry about this, Church.
Sorry about this, everybody, but money solves everything.
And it did. And why did it all fall apart?
You wanna know? I'll tell you. Because the Soviets cut off the money supply and the old lady.
I couldn't pay her off anymore, so she picked up the phone [tipping off the FBI].
Otherwise, I would not be sitting here. Money solves everything.
— Navy spy John Walker

Protecting Your Company's Data: From Potential Espionage and Spy Activity

If I really thought of the consequences all the time, I certainly wouldn't have been in the business.
I'm sure that the people from Dow Chemicals in Delaware, I'm sure that they didn't think of the consequences of selling Napalm.
If they did, they wouldn't be working at the factory.
I doubt that they felt more responsible for the ultimate use than I did for my equipment.

- Frank Terpi, Former CIA Communications Officer.

I don’t believe that I was affecting the security of this country [the United States] and the safety of its people.
I didn’t give that stuff to the Soviets because I thought espionage was a dirty game.
I mean, that’s trivial.

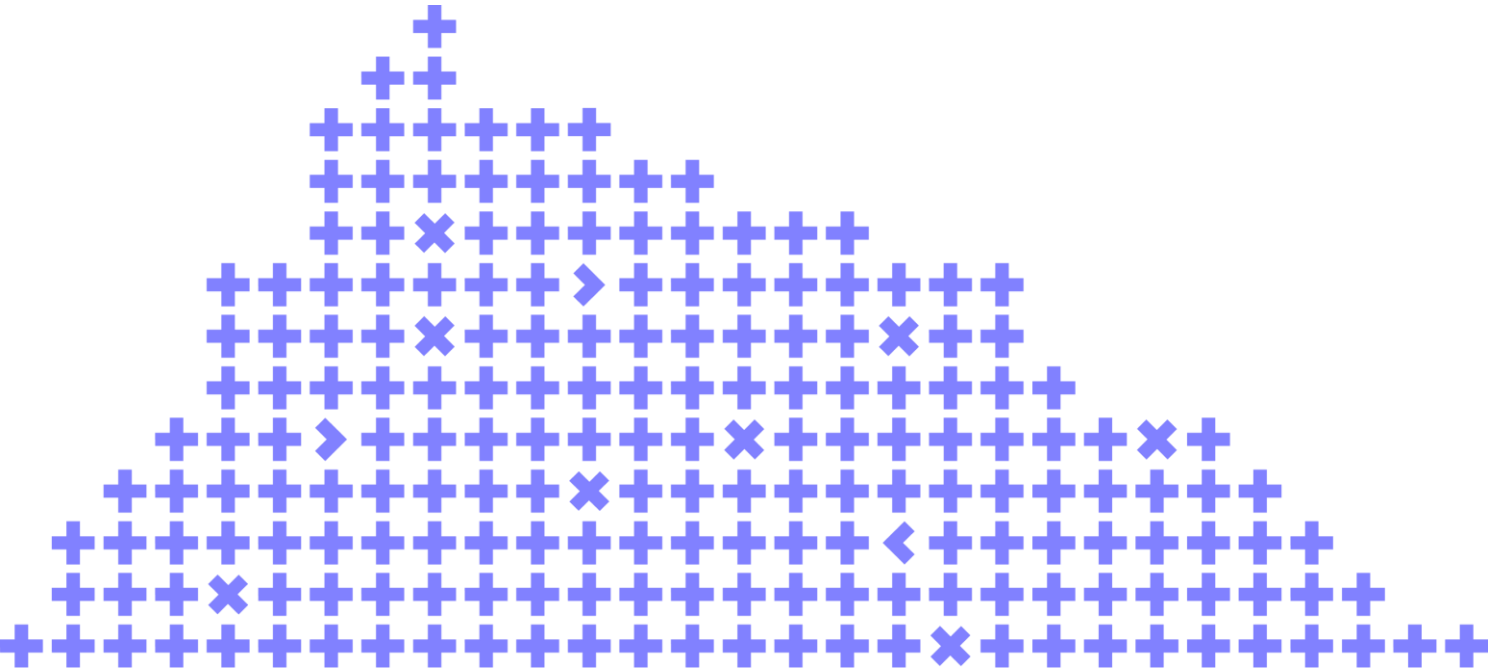
— CIA mole Rick Ames

Any
Questions?

Leave your feedback!

You can rate the talk and give feedback on what you've liked or what could be improved

я



High Load Armenia

Co-organizer

Yandex